



S.L.C.

115TH CONGRESS
1ST SESSION

S. RES. _____

Recognizing the 40th anniversary of the National Renewable Energy
Laboratory in Golden, Colorado.

IN THE SENATE OF THE UNITED STATES

Mr. GARDNER (for himself and Mr. BENNET) submitted the following
resolution; which was referred to the Committee on _____

RESOLUTION

Recognizing the 40th anniversary of the National Renewable
Energy Laboratory in Golden, Colorado.

Whereas, in 1974, President Gerald Ford signed legislation
establishing the Solar Energy Research Institute (re-
ferred to in this preamble as "SERI");

Whereas, in July 1977, SERI began operations in Golden,
Colorado;

Whereas, on May 3, 1978, President Jimmy Carter cele-
brated national Sun Day by visiting SERI;

Whereas, on September 16, 1991, President George H.W.
Bush officially redesignated SERI as the "National Re-
newable Energy Laboratory" (referred to in this pre-
amble as "NREL");

Whereas 2017 marks the 40th anniversary of NREL in Golden, Colorado;

Whereas NREL is the primary national laboratory dedicated to renewable energy and energy efficiency research;

Whereas the mission of NREL is to advance science and technology for the good of the United States in critical areas, including fuels and materials, sustainable transportation, energy efficiency, renewable energy, and systems integration;

Whereas the researchers, facilities, tools, and analyses of NREL catalyze technology innovations enabling abundant energy resources and new business opportunities;

Whereas the science and engineering leadership of NREL is transforming the energy system of the United States into a clean, affordable, reliable, and resilient energy system;

Whereas NREL has established 749 active partnerships with small businesses, corporations, institutions of higher education, and government agencies nationwide;

Whereas, since 2012, NREL has obtained 147 United States technology patents and made 814 innovation disclosures;

Whereas the cost of cellulosic ethanol has decreased by 67 percent since 2001, largely due to NREL research on fermentation catalysts and biochemical process innovations, which enabled the first commercial integrated biorefineries;

Whereas the contributions of NREL to multilaboratory energy storage system research and development has—

- (1) enhanced safety, efficiency, and design;
- (2) resulted in a nearly 50-percent cost reduction;

and

(3) created opportunities for transportation electrification and electricity grid resilience;

Whereas NREL innovations in wind turbine blades, gearboxes, controls, and resource measurements have helped lower the cost of wind energy by nearly 80 percent since 1974;

Whereas during the 40 years since NREL began its research into photovoltaic materials, cell designs, manufacturing, and module reliability, the cost of solar energy has fallen 96 percent;

Whereas NREL led the interoperability and standardization efforts necessary for wind and solar market growth, and going forward, NREL will use its world-class Energy Systems Integration Facility to enable reliable and affordable energy for consumers around the world;

Whereas the work of NREL relating to geothermal power and ocean energy enabled the commercial deployment of geothermal power and ocean energy systems that leverage local resources to diversify the energy portfolio;

Whereas, because each dollar invested in energy efficiency yields 2 dollars in energy savings, innovative whole-building design and component research at NREL has spurred the growth of energy efficiency businesses, which, as of May 2017, employ 2,200,000 individuals;

Whereas, through outreach, NREL has worked with thousands of stakeholders across the United States toward the adoption of alternative fuels and vehicles that, by 2013, resulted in 1,000,000,000 gallons of petroleum displaced per year;

Whereas NREL energy technology advancements can be used by the Department of Defense—

(1) to reduce the nearly \$4,000,000,000 annual energy bill of the Department of Defense;

(2) to protect forward operations by reducing vulnerability to the energy supply chain; and

(3) to enable more capable war-fighting through the use of innovative advanced energy, energy efficiency, and microgrid technologies; and

Whereas, for 40 years, NREL has—

(1) attracted passionate scientists and researchers and given them a place to innovate; and

(2) provided industry leadership advancing energy science and technology that has created jobs in the United States, boosted United States economic growth, and strengthened the energy security of the United States: Now, therefore, be it

1 *Resolved*, That the Senate congratulates and cele-
2 brates the historic achievements and the 40th anniversary
3 of the establishment of the National Renewable Energy
4 Laboratory.